

In the Claims

Please amend page 20, line 1 as follows:

Claims What is claimed is:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) NMR-based method comprising generating a NMR spectrum of a mixture comprising at least (i) one hyperpolarised ligand, a target and optionally at least one further ligand, or (ii) a hyperpolarised target and at least one ligand and comparing said NMR spectrum with a reference spectrum of the at least one hyperpolarised ligand or the hyperpolarised target.

2. (Currently amended) The NMR-based method according to claim 1 comprising
 - a) hyperpolarising at least one of said a ligand or said a target,
 - b) forming a mixture by contacting either the at least one hyperpolarised ligand with one of a target and ~~a target~~ and at least one further ligand, or the hyperpolarised target with at least one ligand,
 - c) generating a NMR spectrum of the mixture, and
 - d) comparing said NMR spectrum with a reference spectrum of the at least one hyperpolarised ligand or the hyperpolarised target.

3. (Currently amended) The mMethod according to ~~claims 1 and 2~~ claim 1, wherein at least one of the ligands is selected from the group consisting of proteins, glycoproteins, lipoproteins, polypeptides, glyco-polypeptides, lipopolypeptides, peptides, carbohydrates, nucleic acids or a part, a fragment or a complex thereof and small organic molecules.

4. (Currently amended) The mMethod according to ~~claims 1 to 3~~ claim 1, wherein at least one of the ligands is a small organic molecule of less than 2000 Da.

5. (Currently amended) ~~The m~~Method according to ~~claims 1 to 4~~ claim 1, wherein more than one hyperpolarised ligand is used.
6. (Currently amended) ~~The m~~Method according to ~~claims 1 to 5~~ claim 1, wherein the target is selected from the group consisting of proteins, glycoproteins, lipoproteins, nucleic acids, polypeptides, glycopolypeptides, lipopolypeptides, peptides or a part, a fragment or a complex thereof.
7. (Currently amended) ~~The m~~Method according to ~~claims 1 to 6~~ claim 1, wherein the at least one hyperpolarised ligand or the hyperpolarised target is an isotopically enriched ligand or target.
8. (Currently amended) ~~The m~~Method according to ~~claims 1 to 7~~ claim 1, wherein the at least one hyperpolarised ligand or the hyperpolarised target is selectively isotopically enriched at one or more sites in the molecule.
9. (Currently amended) ~~The m~~Method according to claim 8 wherein the at least one hyperpolarised ligand or the hyperpolarised target is selectively isotopically enriched at one site in the molecule with ^{13}C or ^{15}N .
10. (Currently amended) ~~The m~~Method according to claim 9 wherein the enrichment is a ^{13}C -enrichment.
11. (Currently amended) ~~The m~~Method according to ~~claims 1 to 10~~ claim 1, wherein the NMR spectrum generated is a one-dimensional NMR spectrum
12. (Currently amended) ~~The m~~Method according to ~~claims 1 to 11~~ claim 1, wherein the NMR spectrum generated is generated using low flip angles.

13. (Currently amended) ~~The m~~Method according to ~~claims 1 to 12~~ claim 1, wherein the comparison with the reference spectrum shows a chemical shift difference, a relaxation time difference or a NOE effect difference.

14. (Currently amended) A method of performing an NMR-assisted drug discover comprising the step of using one or more ~~Use of hyperpolarised ligands and/or hyperpolarised targets in NMR-assisted drug discovery.~~

15. (Currently amended) A method of performing a ligand competition assay comprising the step of using one or more ~~Use of isotopically enriched hyperpolarised ligands in ligand competition assays.~~